FORCE PLANNING CONSIDERATIONS FOR ARMY XXI

William T. Johnsen

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Comments pertaining to this report are invited and should be forwarded to: Director, Strategic Studies Institute, U.S. Army War College, 122 Forbes Ave, Carlisle, PA 17013-5244. Comments may also be conveyed directly to the author at the same address or by telephone: commercial (717) 245-4076 or DSN 242-4076, or by internet: johnsenw@carlisle-emh2.army.mil Copies of this report may be obtained from the Publications and Production Office by calling commercial (717) 245-4133, DSN 242-4133, FAX (717) 245-3820, or via the Internet at rummelr@carlisle-emh2.army.mil

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FOREWORD

The U.S. Army has moved along the path of preparing for the 21st century. This process began with the conceptual examinations and assessments carried out under the "Louisiana Maneuvers" and the Army's Battle Labs, and matured through the Force XXI process. The Army recently completed its first series of Advanced Warfighting Experiments that will shape the redesign and restructure of the future force, Army XXI, for the early years of the new millennium.

While the broad outlines of Army XXI have been sketched out, many of the details remain to be filled in. Undoubtedly, these efforts will be influenced by the recent reports of the Quadrennial Defense Review (May 1997) and the National Defense Panel (December 1997). Indeed, debates over details of the force structure and the ultimate size of the Army are not likely to abate any time soon.

To assist in the further conceptual development, Dr. William T. Johnsen places Army XXI in a broad strategic context. He briefly examines the anticipated international security environment and the roles that the U.S. Armed Forces and the Army can be expected to perform. He then assesses a wide range of general factors that will influence the capabilities needed to carry out the anticipated roles. Finally, he examines general and specific criteria that can be used to determine the appropriate size of Army XXI.

Dr. Johnsen's conclusions are likely to spur further debate on the force structures of Army XXI. These debates are essential if the U.S. Army is to be prepared to carry out its future roles. It is in this context that the Strategic Studies Institute offers this contribution to the dialogue.

RICHARD H. WITHERSPOON Colonel, U.S. Army Director, Strategic Studies Institute

BIOGRAPHICAL SKETCH OF THE AUTHOR

WILLIAM T. JOHNSEN joined the Strategic Studies Institute in 1991 and currently serves as an Associate Research Professor of National Security Affairs. He also held the Elihu Root Chair of Military Studies at the U.S. Army War College from 1994-1997. An Infantry officer before retiring from the U.S. Army, Dr. Johnsen served in a variety of troop leading, command, and staff assignments. He also served as an Assistant Professor of history at the U.S. Military Academy, and as an arms control analyst at Supreme Headquarters Allied Powers Europe (SHAPE). In addition to his SSI studies, he has published a number of journal articles on U.S.-European security issues. His most recent SSI studies include U.S. Participation in IFOR, The Future Roles of U.S. Military Power and Their Implications, and "More Work in the Augean Stables" in Thomas-Durell Young, ed., NATO's Command and Control Structures. His current research focuses on issues that surfaced during the Quadrennial Defense Review, especially those affecting the Army. Dr. Johnsen holds a B.S. degree from the U.S. Military Academy and an M.A. and Ph.D. in history from Duke University. He also is a graduate of the Armed Forces Staff College and the U.S. Army War College.

SUMMARY

The international security environment can be expected to remain in a state of flux through 2010 and beyond. Despite the greatly improved security conditions, residual risks to U.S. national interests will remain from the Cold War period (though not from the Cold War). New dangers have emerged (and more can be expected). Concomitantly, the absence of superpower confrontation has removed many Cold War constraints on the use of U.S. military power for other than vital national interests. The current scope and pace of operations, therefore, can be expected to continue or increase for the foreseeable future.

To protect U.S. national interests, the U.S. Armed Forces will continue to perform their long-standing roles of deterrence, compellence, and support to the nation. Because this performance of roles may vary from the experience of the Cold War, the consequences for Army XXI forces, the land power contribution to U.S. military power, could be significant.

Promoting U.S. national interests through shaping the international security environment also will become a major role for the U.S. military. While diplomatic and economic initiatives will play key parts, shaping the environment frequently will require the limited application of military power to achieve long-term U.S. goals of regional and international stability, improved economic climates, and increased democracy. The United States currently faces a window of opportunity—perhaps limited—where it does not face a global military competitor, and ongoing actions are effectively containing major regional competitors. It must take full advantage of this opportunity to shape the future international security environment.

To fulfill its multiple roles, the Army's force structure and design must provide the capabilities necessary to operate across a broad spectrum of conflict in peacetime, crisis, and war; to perform effectively throughout the full range of military operations; and perform successfully at the tactical, operational, and strategic levels of war. This broad range of capabilities also must ensure that the United States is not susceptible to asymmetrical counters that circumvent U.S. capabilities or attack perceived U.S. vulnerabilities.

The Army will have to generate these capabilities despite reductions in personnel and force structure beyond the significant cuts that have occurred in recent years. The triple demands of increased operational pace, reduced force structure, and constrained budgets will require the Army to undertake a significant revision of current force structures to prevent Army XXI from becoming a "hollow force."

This restructuring also will be affected by the potential inherent in the "revolution in military affairs" (RMA). Whether the United States or others are on the brink of an RMA is an open question; but we must strive to apply as much improved technology, doctrine, and organizational change as possible to give Army XXI forces the greatest possible edge.

The RMA is not without its complications, however. For instance, the high costs associated with the development and procurement of technologically sophisticated weapons systems, equipment, and capabilities undoubtedly will strain a constrained or declining budget. Furthermore, planners must ensure that a focus on RMA-equipped forces does not lead to gaps in Army capabilities that could be exploited by an opponent.

Nor should planners assume that forces using high technology, precision, stand-off weapons systems will meet all demands across the conflict spectrum. Because of their focus on high technology precision engagement and high speed maneuver, RMA-type forces may be very good at deterring, punishing, and compelling. But, they may not lend themselves to effective employment in many peacetime engagement and stability operations, to include combat operations along the lower portion of the range of military

operations. As a result, some force structure will have to be devoted to forces capable of performing these key missions.

This may not be easily accomplished, especially if costs to equip the RMA portion of Army XXI limit the amount of force structure available to perform missions along the midto low-intensity portions of the conflict spectrum. Alternatively, these costs could leave little funding available for peacetime engagement activities.

In developing its force structures, the Army will have to establish priorities on how it apportions its capabilities in the future. Forces primarily intended to perform deterrence and compellence roles may be equipped with high levels of RMA equipment. Forces largely expected to perform shaping and support to the nation roles could be equipped with older systems augmented with as much technology as possible. Eventually, these forces would receive full-scale fielding of RMA systems.

The fiscal inability quickly to equip all units to Army XXI standards will result in a hybrid force that contains some units with RMA types of equipment, while, perhaps, a large portion (at least initially) will be equipped with "legacy" systems of the current force. RMA-equipped forces must be able to operate in close conjunction with legacy systems to avoid creating gaps in capabilities that an opponent could exploit. Similar accommodations will have to be made to ensure that Army XXI units are capable of operating with allies and coalition partners.

Developing force structures for Army XXI also will depend on the relative success of shaping activities between now and 2010. If shaping activities largely are unsuccessful, then a greater proportion of force structure will have to be devoted to deterrence and compellence roles, and there may be little incentive to devote substantial effort to shaping activities. If shaping activities enjoy mixed success, then forces may be more evenly apportioned between the various roles. If shaping largely succeeds, then relatively more forces may be devoted to those activities.

As far as sizing Army XXI is concerned, the two Major Theater War (MTW) criteria will apply for the near term. It can be adjusted as conditions merit. While RMA capabilities may be able to reduce the size of forces assigned against the two MTW requirement, the costs associated with this fielding may not free up as much force structure for other roles as may be anticipated. This will affect the ability to spare forces to perform the shaping role in the immediate future. To meet these demands, therefore, may require a greater reliance on hedging forces as a risk management tool.

In developing Army XXI force structures, planners must be aware of the risks inherent in optimizing forces for either wartime or shaping roles. While the Army should opt for flexible forces that can be task organized for multiple missions, it should not go to extremes. It may be neither possible nor desirable to design the ultimate "Swiss Army Knife" of units.

Future requirements for Army XXI may require a fundamental overhaul of how the Total Army is structured and organized. Specifically, the Army may have to revise the current "Abrams Model" of the Total Force mix that relies significantly on Reserve Component combat support (CS) and combat service support (CSS) to support major, sustained Active Component operations. This may require substantial redesign of the U.S. Army Reserve and the U.S. Army National Guard, as well as the Active Component, to ensure an appropriate mix of capabilities, modernization, and readiness; for example:

- The Active Component's current mix of combat, CS, and CSS units may have to be realigned to provide greater Active Component CS and CSS capability to support more frequent and prolonged smaller-scale contingencies and shaping operations.
- The Reserve Components, particularly the Army National Guard, may have to go beyond current plans to convert heavy combat formations to CS and CSS

units to generate the capabilities necessary to meet the anticipated increase in smaller-scale contingencies and shaping commitments.

 Financial constraints on funding highly advanced equipment may require a mix of Active Component and Reserve Component heavy combat forces to provide a risk management tool. These forces would have to be able to "swing" between support of RMAequipped forces in the deter and compel roles and the conduct of shaping and support to the nation roles. These forces also would have primary responsibility for foreclosing potential asymmetric approaches to U.S. RMA capabilities.

To accommodate all demands on future force structure capabilities will require Army XXI forces that are versatile (i.e., capable of operating effectively in peace, crisis, and war); flexible (i.e., can be employed in more than one role); and adaptable (i.e., possess multi-mission capable equipment and personnel that can adapt to rapid changes in roles, missions, and tasks). Only such a force will be able to protect and promote U.S. national interests, while limiting the ability of potential opponents to identify and exploit asymmetric challenges to U.S. capabilities.

FORCE PLANNING CONSIDERATIONS FOR ARMY XXI

INTRODUCTION

Joint Vision 2010 provides a "conceptual template" for future joint warfighting in the period 2010 and beyond.

Focused on achieving dominance across the range of military operations through the application of new operational concepts, this template provides a common direction for our Services in developing their unique capabilities within a joint framework of doctrine and programs as they prepare to meet an uncertain and challenging future.¹

In developing this conceptual template, *Joint Vision* 2010 outlines four operational concepts: dominant maneuver, precision engagement, full dimensional protection and focused logistics, that are intended to provide "full spectrum dominance" over any potential opponent.² It also "creates the template to guide the transformation of these concepts into joint operational capabilities."³

Similarly, "Army Vision 2010 is the blueprint for the Army's contributions to the operational concepts identified in Joint Vision 2010." Likewise, "Army Vision 2010 strives to visualize developing concepts and technologies to improve capabilities circa 2010, " ⁵

While these documents sketch the general outlines of the capabilities required of joint and Army forces in 2010 and beyond, much detailed work remains to turn concepts into reality. One particularly important contributor to these future capabilities will be future Army force structures. This monograph, therefore, will explore the major conceptual trends that will shape future force structures. To this end, the monograph first outlines the U.S. role in the anticipated international security environment. It then examines and analyzes the likely military roles that the

Army of 2010 and beyond, Army XXI, can be expected to perform. The report next analyzes a wide range of general factors that will influence force structure development. It then outlines general force sizing criteria, identifies specific sizing criteria for each military role, and assesses potential trade-offs among forces. The report concludes with observations and recommendations.

U.S. ROLE IN WORLD AFFAIRS IN THE 21ST CENTURY

The Future International Security Environment.

Before delving into the specifics of the size and structures of Army XXI, it is important to understand the underlying conditions that will shape the future security environment. A detailed forecast of the future is not necessary, however. Frankly, the future circa 2015 is too distant to attempt to define with granular detail. Moreover, pinpoint forecasts are apt to be wrong, with potentially disastrous consequences if made the conclusive basis of plans. More useful for planning purposes is a range of outcomes from which planners can derive the broad outlines of the future and assess the capabilities needed to meet those conditions. This approach avoids "a shot in the dark" and offers greater flexibility in responding to an evolving international security environment without wholesale (and usually expensive) changes.

Many strategic forecasts of the second and third decades of the 21st century are less than optimistic. ⁶ Futurists Alvin and Heidi Toffler offer a world divided into three economically competing tiers, based largely on the ability to utilize information. ⁷ Noted scholar Samuel Huntington warns of "The Clash of Civilizations" along cultural fault lines. His views are reinforced by Benjamin R. Barber, who sees a stark cultural confrontation: "Jihad vs. McWorld," where, regardless of the winner, democracy could suffer considerably. ⁸ Journalist Robert Kaplan pessimistically posits a developed world largely at odds with a developing

world racked by disintegrating states, corruption, and omnipresent violence. 9

Visions of future warfare parallel these assessments. Military historian and strategic theorist Martin van Creveld concludes that conventional warfare between states is increasingly anachronistic. ¹⁰ Professor Robert J. Bunker notes that warfare may be in the midst of an epochal change, where conflict stems primarily from internal social and political factors, and warriors fight differently from current conceptions of modern warfare. ¹¹ Strategist and former Army officer Ralph Peters points to an era of brutal tribal and ethnic warfare. ¹²

Despite the end of the Cold War, therefore, the United States will face a wide range of security risks. Challenges to U.S. national interests long overshadowed by superpower confrontation are likely to remain. 13 Traditional sources of conflict, such as demographic pressures, resource shortages, irredentism, and ethnic or nationalist antagonisms are unlikely to abate. New challenges to U.S. national interests in key regions of the world may emerge from a volatile international security environment. 14 Moreover, natural or man-made disasters of significant proportions will occur periodically, exacerbating already strained conditions. Thus, while optimists (of which the author is one) hope that the evolving international security environment reduces challenges to U.S. national interests, it would be highly imprudent to assume that global harmony will emerge by 2015.

Given these forecasts, the United States can expect to be involved in a number of "lesser," but still substantial conflicts that could threaten its interests or those of its allies. Whether the United States will face a major military competitor circa 2010-2015 is an open question, but prudent force planning must take such a worst case into account. Even in the absence of a major military competitor, the United States will likely face a number of major regional powers or coalitions which, because of the size of their forces, geo-strategic realities, and distances over which the United States must project power, may prove to be highly

challenging competitors. 16 In planning for the period 2010 and beyond, force designers must take into account the potential for the United States to face multiple major regional wars. Granted, this may be an example of "worst case planning," but it is careful planning nonetheless.

U.S. Role in the 21st Century Security Environment.

While the United States must be prepared for such pessimistic outcomes, it is not required passively to await such results. To the contrary, in this period when the United States does not imminently face a global competitor, it should assume the initiative and shape the world in a manner that promotes and protects U.S. interests, while benefiting allies and partners who share like national interests.

The United States, however, must be cautious about how it approaches shaping the global security environment. Simply because Americans see themselves benignly does not mean that other countries or groups view us similarly. The United States currently possesses a powerful, dynamic culture, the world's leading economy, and preeminent military power. And, while the United States does not seek territory or undue influence in the internal affairs of other states, these strengths intimidate others. The United States, therefore, must explain carefully that it is U.S. ideas—democracy, individual freedom, the rule of law, market economies, peaceful resolution of conflict (internal or external), and the extension of human rights—that it seeks to promote.

Convincing current and potential allies and partners (as well as adversaries) of U.S. intentions should begin with an explicit description of U.S. goals for the international security environment. While events undoubtedly will alter the specific issues, the basic tenets outlined in *A National Security Strategy for a New Century* will remain timeless in their application:

- To foster an undivided, democratic and peaceful Europe;
- To forge a strong and stable Asia-Pacific community;
- To continue America's leadership as the world's most important force for peace;
- To create more jobs and opportunities for Americans through a more open and competitive trading system that also benefits others around the world;
- To increase cooperation on confronting new security threats that defy borders and unilateral solutions; and,
- To strengthen the military and diplomatic tools necessary to meet these challenges. 17

Progress toward these objectives is not inevitable and success is not guaranteed. Because these ideals and values appeal to many individuals throughout the world, some governments, especially authoritarian ones, will oppose U.S. shaping efforts. Similarly, other cultures (e.g., Latin American, West and East European, Islam, and an array of oriental) may fear U.S. cultural dynamism and oppose U.S. endeavors. This is not to argue against shaping activities. It is merely to point out that these efforts occasionally will face opposition. Good judgment and effective statecraft will be needed to select the critical cases where prospects for success are good (and success will yield important results) from the multitude of resource sinkholes that will never achieve decisive success. This is neither optimistic, nor pessimistic, simply realistic.

ANTICIPATED ROLES OF THE U.S. ARMY

The U.S. Armed forces will play a pivotal part in achieving U.S. objectives. Under the new defense strategy articulated in the *Report of the Quadrennial Defense Review* (QDR), U.S. forces will shape the international environ-

ment, respond to the full spectrum of crises, and prepare now for an uncertain future. Shaping will be accomplished by promoting regional stability, preventing or reducing conflicts and threats, and deterring aggression and coercion. Responding includes deterring aggression and coercion in crises, conducting smaller-scale contingencies (encompassing the full range of operations beyond peacetime engagement activities but short of major theater war) and fighting and winning major theater wars (MTWs). Preparing will be accomplished by pursuing a focused modernization effort, exploiting the "revolution in military affairs" (RMA) and "the revolution in logistics affairs," and hedging against "wild card" scenarios. ¹⁸

Within this strategy, U.S. forces (and hence the Army) can be expected to perform the long-standing roles of deterrence, compellence, and support to the nation. How these roles will be fulfilled may vary—in some cases considerably—from the more traditional forms that have been in effect for the past half century. Additionally, a new role, shaping, will subsume the traditional role of reassurance, but will expand to include new dimensions allowed by the end of the Cold War. ¹⁹

Deterrence.²⁰

Deterring aggression against the United States, its citizens, interests, allies, and friends remains an enduring role for the U.S. Armed Forces, but the deterrent role of conventional forces will increase in relative importance. The principal focus of the past 50 years on the nuclear component of deterrence is likely to diminish, largely due to the absence of superpower competition. ²¹ Also, because most states and actors do not possess nuclear weapons, a U.S. nuclear retaliation could appear disproportionate to the world community and, therefore, is unlikely to be credible deterrent.

At the same time, states or groups may emerge that do not share the highly developed "culture of nuclear deterrence" which evolved during the Cold War. Rogue states or non-state actors may gain access to nuclear devices or material. Transnational organizations, criminal groups, and terrorists may come to possess chemical or biological agents. The difficulty of tracing exactly those responsible for a terrorist or isolated act using such weapons is well-known. Even if perpetrators can be identified, such states or groups may perceive little or no likelihood that they will face effective retribution in kind, or they might be indifferent to such punishment.

Concomitantly, risks posed by possible adversaries will continue to fall across a broad range of the conflict spectrum. As recent experience indicates, one can expect an increased number, frequency, and diversity of conflicts to be deterred in the future. (See Figure 1.) Thus, the number of potential actors to be deterred will be limited primarily by the U.S. appetite to become involved. Conventional forces, therefore, will need a commensurate range of capabilities to meet these varied challenges.

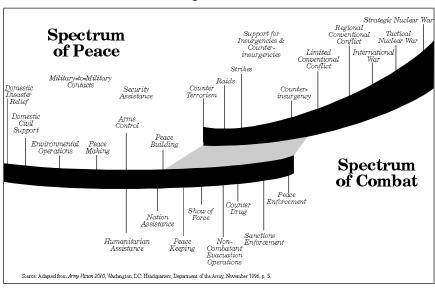


Figure 1. Military Spectrum of Conflict.

Compellence.²²

Fighting and winning the nation's wars will remain the ultimate responsibility of the Army of the future. But

limiting compellence only to fighting wars will be too narrow a construct for the future. The limited use of force to achieve diplomatic goals will remain an essential role for the U.S. military. Indeed, the absence of superpower competition, volatile international security conditions, and a policy of shaping the security environment may lead to increased instances that impel the use of force for other than warfighting in the traditional sense. ²³

A wider application of military power to compel will have considerable consequences for Army force structures. On the one hand, future forces must have sufficient capability to fight and win the nation's large-scale wars. On the other hand, they also must be able to respond to a broad range of smaller-scale contingencies: e.g., show-of-force operations, interventions, limited strikes, noncombatant evacuations, peacekeeping, and humanitarian response. ²⁴ Forces also must be able to meet the demands of a wide range of coercive and persuasive diplomatic efforts. These varied requirements will call for diverse capabilities within the force structure, and perhaps (for reasons that will be discussed later) larger forces than might be anticipated.

Support to the Nation.

Support to the nation missions will vary from traditional disaster relief and support of civil authorities; to assisting in the rebuilding of national infrastructure; to responding to ecological disasters; even to supporting the delivery of health care to underserved segments of U.S. society. Other missions may crop up as pressures build for increased military support to civil authorities, especially combating international crime, drug trafficking, and terrorism. Contributing to border and refugee control may also become significant missions. ²⁵

The extent to which such support is appropriate, particularly helping to combat organized crime, drug trafficking, and terrorism, is an open question at this time. But the consequences for future Army force structures (and budgets) could be considerable if the Army becomes deeply

involved in such missions. Moreover, political and military leaders need to weigh the potential costs and consequences, especially the impacts on American civil-military relations, and avoid ill-considered decisions in the heat of some future crisis.

Both traditional and new support missions will influence force structures. Because many current missions are set by statute or Department of Defense (DoD) regulation, the Army will have to maintain requisite forces to perform those tasks. It also will have little influence over restructuring forces currently dedicated to those tasks. On the other hand, many of these missions can be accomplished by forces performing other roles.

Shaping.

The new Defense Strategy laid out in Secretary of Defense Cohen's *Report of the Quadrennial Defense Review* affirms that the U.S. military will be used to shape the future global security environment. ²⁶ Specifically, the strategy provides that:

... the U.S. military and the Department of Defense must be able to help shape the international security environment in ways favorable to U.S. interests, respond to the full spectrum of crises when directed, and prepare now to meet the challenges of an uncertain future. These three elements—shaping, responding, and preparing—define the essence of U.S. strategy between now and 2015.²⁷

Shaping will subsume the long-standing role of reassurance, which according to historian and strategist Sir Michael Howard, who coined the term, "...provides a general sense of security that is not specific to any threat or scenario." Shaping will be a more active role that serves U.S. national interests by advancing U.S. values and beliefs; promoting regional stability; improving cooperation among allies, partners, friends, and, occasionally, adversaries; reducing the perceived need for military competition; and cultivating goodwill toward the United States. These factors (and more) contribute to an improved

international security environment that ultimately benefits the United States, its allies, and like-minded nations.

Shaping includes a wide range of peacetime engagement activities, such as peacekeeping or other peace operations (e.g., support to diplomacy, peace making, peace building, and preventive diplomacy²⁹), nation assistance, military-to-military contacts, and security assistance.³⁰ Shaping activities also might vary from deployment of small teams (for instance, military-to-military contacts, medical detachments) to large-scale disaster relief to smaller-scale contingency operations (e.g., peace operations).

In dealing with smaller-scale contingencies, some question may arise as to where shaping ends and responding to crises begins. At present, there is no hard and fast dividing line between the two. (See Figure 2.) For example, the ongoing operation in Bosnia could be perceived as an effort to reassure allies of U.S. commitment to NATO, to build stability in Central and Southeastern Europe, and to provide conditions for the growth of democracy and free markets. Conversely, the same operation can be viewed as a response to a vicious war and an effort to prevent its spread to key portions of Europe.



Figure 2. Shaping versus Responding.

For the moment, perhaps, a working division of labor is that shaping activities are those that buttress general deterrence and support stability over time, while responding contributes to bolstering deterrence or countering aggression in crisis. This lack of a clear definition of terms should not, however, overly concern policymakers. Such overlap has always existed among the long-standing military roles. For example, deterring opponents helps reassure friends and allies. Similarly, the

ability to compel one adversary may deter another. ³¹ A similar overlap may be possible with shaping activities which contribute to deterrence, and, occasionally, may contain an element of compellence. (See Figure 3.) In sum, policymakers should focus on results and leave debates over semantics to academe.

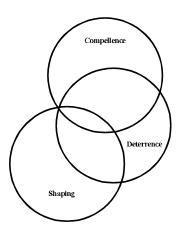


Figure 3. Shaping, Deterrence, and Compellence.

Shaping will continue to be accomplished through a combination of forward stationing of forces, rotation of units to key areas of the world, exercises, and military-to-military contacts. While many of the forces used in the shaping role may come from forces performing deterrence and compellence roles, a complete overlap will not exist. (See Figure 3.) For example, forces engaged in shaping activities may not be perceived by adversaries as contributing effectively to deterrence. Or, a shaping role may be considered so important to U.S. national interests that forces engaged in such activities might be unavailable for the compellence role. Thus, while capabilities for shaping are largely complementary with other roles, additional force structure may be required to conduct the shaping role.

To perform these varied requirements, the Army will need forces capable of operating successfully across the full range of military operations. (See Figure 4.) The aggregate requirements for fulfilling these roles will determine the

force types, organizations, structures, and capabilities needed to protect and promote U.S. national interests. Past capabilities will have to be sustained, but perhaps at different levels. New capabilities will have to be added to meet new demands of the security environment and increased roles, especially shaping. Capabilities no longer needed, or at least in the amounts required during the Cold War, will have to be eliminated or transformed. An examination of the general and specific factors that will influence how these changes are made is the subject of subsequent discussion.

	Military Operations	General U.S. Goal	Examples
C O M B A T	War	Fight & Win	Large-scale Combat Operations: Attack / Defend / Blockades
	NON Coperations Other Than War BAT	Deter War & Resolve Conflict	Peace Enforcement / Noncombatant Evacuation Operations (NEO) / Strikes / Raids / Show of Force / Counterterroris m / Peac ekeeping / Counterins urgency
		Promote Peace	Antiterroris m / Dis aster Relief / Peacebuilding / Nation Assistance / Civil Support / Counterdrug / NE O

Source: Joint Publication 3-0, Doctrine for Joint Operations, February 1, 1995, p. 1-2.

Figure 4. Range of Military Operations.

FUTURE FORCE STRUCTURES³²

Establishing the detailed force structures and units (e.g., nomenclature, basic and detailed structure, equipment, and manning levels) circa 2010 is beyond the scope of this monograph, and will be left to more competent authorities.³³ Nonetheless, it is important to analyze the general factors that will influence the eventual force structures. To ease the analytical burden, the commentary below is divided into more manageable portions. A range of general factors first will be considered, followed by an examination of characteristics and sizing criteria for forces

performing the various roles. The section concludes by examining potential trade-offs among the various roles.

General Factors Affecting Future Force Structures.

No Tabula Rasa. Revolutionary change may be possible by 2010, but anticipated conditions argue against a radical departure from the currently planned *Joint Vision 2010* force. First, the DoD and the Army already exist, and planners will not be able fundamentally to reorganize the Army from top to bottom in a short time. ³⁴ Second, many Service roles, functions, and missions are set by law, and are unlikely to be eliminated. Finally, *Joint Vision 2010* has set an evolutionary programmatic path that the Army will pursue through 2010. ³⁵

Interagency Operations. Army forces must be able to operate with the other instruments of national power in an orchestrated approach to solving problems. In short, the Army and the military, in general, cannot afford to "go it alone." Moreover, while military participation may be necessary for success, it rarely will be sufficient by itself. This will require a more expansive and effectively structured inter-agency process to orchestrate an appropriate blend of the instruments of national power. 36

Joint Operations. Similarly, expected conditions dictate that Army forces will operate for theater commanders in conjunction with the other Services. While joint capabilities are built into current forces, planners must ensure that greater joint capabilities are integrated into future forces. This especially will be the case with high technology, precision engagement forces. Without such attention, the Army (and the other Services) risk optimizing future forces for its (their) particular needs at the expense, potentially, of interoperability and effectiveness (and relevance) in satisfying theater commanders' operational requirements.

Multilateral Cooperation. U.S. policies of engagement will sustain, and likely increase, opportunities for U.S. participation in multilateral efforts. In some cases, the United States will participate with allies and partners to

keep costs down and to increase the effectiveness of its efforts. In other cases, pressures from allies and partners may lead to U.S. involvement.

Multilateral cooperation also may be a means for the United States to economize its force structure requirements by relying on the capabilities of allies and partners. While the United States legitimately can expect its friends and allies to assume some of the force structure burden, U.S. planners cannot expect too much. U.S. and allied interests and objectives will not always coincide, and the United States must be prepared to act unilaterally, if required. The Moreover, many allies and friends who can be expected to cooperate with the United States are notably deficient in logistics, intelligence, and communications capabilities, and they lack the strategic mobility to deploy the few units available for operations. Considerable U.S. logistical and other support may still be required to perform such tasks.

In designing future force structures, planners must ensure that U.S. forces are able to operate effectively with allies. Planners cannot allow the Army circa 2010 to become so specialized or advanced that allies are not able to cooperate productively—a point that key allies already are raising with the United States. If the United States outstrips its allies and partners, then they may be unable to assist U.S. forces. Conversely, cooperation with allies and partners not possessing capabilities similar to U.S. forces may constrain the full application of U.S. military power, thereby endangering U.S. national objectives and forces. Such outcomes may force unilateral U.S. military action, or severely constrain U.S. diplomatic and military options. Neither of these consequences is palatable.

Overseas Engagement.³⁹ The ultimate purpose of overseas engagement is to protect and promote U.S. national interests. It reassures allies of U.S. commitment to specific countries or general regions and can be instrumental in the execution of U.S. policy initiatives. The physical presence of U.S. forces also contributes to deterring potential adversaries and, if required, can provide the first step to compelling opponents.

Overseas engagement can take many forms. The more permanent and productive variations include overseas stationing, periodic rotation of units to a country or region, recurring exercises that foster increased transparency and cooperation, security assistance, nation assistance, and reciprocal training and education. Separate forces will not be needed for these forms. Indeed, forces for overseas engagement can come from overlapping areas of force structures. But, sufficient forces will be needed to meet the presence requirements, as well as to provide a rotation base. 40

Power Projection. Despite its unique geostrategic position and extensive overseas interests, strategic constraints (especially fiscal and availability of forces) are likely to yield limited overseas engagement. The vast majority of future forces, therefore, must be capable of rapid power projection into an overseas theater of operations. This requirement will apply not only to forces based in the continental United States, but to forces based overseas which also must be capable of being projected into a theater different from their peacetime locations. These forces must be able to perform missions ranging from relieving suffering, preventing or stopping small-scale conflicts, and reversing large-scale regional aggression.

The U.S. Army's ability to project power effectively will be a function of ready Active Component forces, rapid access to the Reserve Components, a responsive mobilization base, adequate strategic lift, prepositioned supplies and equipment, adequate force protection, and global command and control. All of these requirements will influence the types and size of future force structures.

Revolution in Military Affairs (RMA). The RMA is many things to many people. 41 Andrew Marshall, Director, Office of Net Assessment, Department of Defense and mid-wife to the U.S. version of the RMA defines it as "a major change in the nature of warfare brought about by the innovative application of new technologies which, combined with dramatic changes in military doctrine and operational

concepts, fundamentally alters the character and conduct of military operations." ⁴²

The RMA holds the potential to increase capabilities for deterrence, or if deterrence fails, to conclude hostilities more quickly and at less cost in lives and treasure. Pursuit of the RMA and its related equipment, organizations, and training strategies will help ensure continued U.S. technological primacy, thereby making it difficult for an adversary to "steal a technological march" that might negate existing or planned U.S. capabilities.

Because of the RMA's reliance on high technology, and the rising costs of research, development, and acquisition of new equipment and steady-state or declining budgets, however, it is highly unlikely that the Army will be able to equip all forces to the same RMA standard. Or, the time required for complete fielding will result in stratified holdings within the force. 43

Trade-offs will have to be made on the purchase of RMA-equipped forces. Forces concerned predominantly with the deter and compel roles may be most amenable to high technology solutions proposed by proponents of the RMA. They should receive priority in fielding of Army XXI and follow-on equipment. If costs are very high or budgets decline, RMA equipment may have to be rationed within forces performing the deter and compel roles.

Such a division of responsibility, equipment, and readiness runs the risk of creating a multi-tiered army, where RMA-equipped forces might be perceived as the "preferred" element of the future force. Forces equipped with older generations of equipment might be perceived next in the pecking order, and forces capable only of conducting shaping, last. On the other hand, forces involved in shaping activities—if properly manned and equipped—could be perceived as the preeminent element of the future force because they would be deployed most often and would have the opportunity to see their efforts realized more frequently. RMA-equipped forces would be next in priority, leaving forces with older equipment in a perceived "third"

class status." In any event, force planners must ensure that perceptions of inequality in terms of assignments, promotions, and benefits do not lead to a *de facto* or *de jure* caste system.

A varied force structure is not necessarily bad. Forces may have to operate under conditions that do not always lend themselves to high technology solutions that rely on massive concentrations of firepower or effects to overwhelm an opponent. Industrial Age" forces may be more effective under such conditions. Similarly, forces employed for a shaping role may have little use for high technology, high precision, and highly destructive weapons systems.

Planners also must ensure that a focus on RMA-equipped forces does not lead to gaps in Army capabilities that could be exploited by an opponent using asymmetric means to circumvent the capabilities of an RMA-equipped force. Nor should planners assume that forces using high technology, precision, stand-off weapons systems will meet all demands across the conflict spectrum. Because of their focus on high technology precision engagement and high speed maneuver, RMA type forces may be very good at deterring, punishing, and compelling. But, they may not lend themselves to effective employment in many peacetime engagement and stability operations, to include combat operations along the lower portion of the range of military operations. As a result, some force structure will have to be devoted to forces capable of performing these key missions.

This may not be easily accomplished, especially if costs to equip the RMA portion of Army XXI limit the amount of force structure available to perform missions along the midto low-intensity portions of the conflict spectrum. Alternatively, these costs could leave little funding available for peacetime engagement activities.

This discussion does not argue against technology. Soldiers and units should be provided with improved equipment and capabilities. But technology is not a panacea. Indeed, in some cases, technological solutions may contribute to failure (e.g., heavy reliance on firepower at the

expense of the indigenous population in South Vietnam). Planners must balance the drive for technological advances with the need for such improvements to ensure that technology contributes to, rather than detracts from mission accomplishment.

Countering Asymmetric Approaches. Recognizing the strength of the U.S. military, particularly one equipped with highly advanced equipment, potential adversaries undoubtedly will take asymmetrical action (i.e., any approach that seeks to avoid an opponent's strengths while focusing your own strengths on an opponent's perceived weakness) to offset U.S. technological and military capabilities. ⁴⁵ Those responses may occur at all levels of war and across the spectrum of conflict. ⁴⁶

Asymmetric responses also may concern the stake of U.S. national interests involved versus the interests of an opponent. If U.S. forces are committed to operations where less than vital U.S. national interests are at risk, but an adversary perceives its vital interests to be at stake, then an opponent may be willing to accept more punishment and casualties than the United States may be willing to sustain in return. Or, world public opinion may find the level of punishment disproportionate to U.S. interests and support for a particular engagement may erode. ⁴⁷ To meet either type of asymmetrical counter, future forces still will require a versatile mix of forces able to operate across the full range of military operations, with high- or low-technology solutions.

Role Specialization versus Task Organization. Ideally, the Army would field sufficient numbers of units to meet the requirements of all potential roles. In the real world of constrained resources, however, the Army must decide whether to field units optimized for specific roles and missions or to task organize existing units and provide those units with specialized training for a particular mission.

On the surface, fielding optimized units is appealing, but a number of formidable drawbacks exist for such an approach. Some analysts, for example, have argued for a focus on warfighting capabilities. 48 But this option ignores other pressing demands for the application of military power under the new security conditions that are vastly different from those of the Cold War. It also passes up opportunities to shape the international environment in ways that promote U.S. national interests, or in ways that could eliminate the potential sources of conflict that might lead to the requirement to fight and win a war.

Other observers argue that warfighting capabilities are adequate to provide the capabilities needed to perform across all roles and missions. ⁴⁹ Such an approach may have been possible before World War II. It may have been the necessary view during the Cold War, when nearly all forces were focused on deterring and possibly fighting the Soviet Union, and perforce had to be considered capable of responding to any smaller contingency, but it may not apply by 2010-2020. ⁵⁰

This "lesser-included" capabilities rationale glosses over the probability that forces will be small relative to the potential scope of their responsibilities and too many missions may lead to a "hollow force," eventually unable to fulfill its ultimate responsibility of fighting and winning wars. It also overlooks the possibility that the capabilities needed for effective shaping activities may not be subsumed within those optimized to deter and compel. Forces fine-tuned for warfighting, especially an RMA force that relies extensively on high technology, may not be as effective outside those roles and missions. For instance, forces equipped with technologically sophisticated systems may not be capable of developing close personal relationships, facilitating delicate negotiations between hostile factions, or supervising peace implementation.

Optimizing forces for warfighting also can lead to multiple unit force structures. For example, the Army currently has five different divisional force structures for its ten Active Component divisions. This creates equipping, manning, and maintaining difficulties, as well as complicates planning for employment of forces. While a single division type may not be realistic, the Army should,

nonetheless, take steps to introduce a fewer number of more standard division structures (as well as other units that have multiple structures to support the different divisions; e.g., maintenance, support, transportation). Or, a move to smaller, more streamlined, but more capable battle formations (whether brigades or battle groups) that can be joined in temporary task forces may prove more productive in the long run.⁵¹

Optimizing for warfighting (especially for mid- to high-intensity conventional warfare) also offers the opportunity for potential adversaries to pursue asymmetric strategies and warfighting concepts that circumvent U.S. capabilities. If the supposedly optimized force does not possess the capabilities and flexibility to respond to such challenges, U.S. interests may be placed at risk. Conversely, a versatile force, capable of responding to a wide scope of possible counters may convince potential opponents that they cannot bypass U.S. capabilities. Unsure of "winning" they may not undertake military operations.

Neither can defense planners optimize a substantial portion of American forces for shaping. The anticipated security environment circa 2010-2020 dictates that the United States maintain considerable capacity to deter and, if necessary, compel potential adversaries. Given the scope of potential missions and fiscal realities, it would be impossible to field sufficient numbers of units optimized for shaping activities. Second, if only limited numbers of such units were created, they would be subject to repeated deployment, with the risk of stressing the units and personnel. Last, units optimized for a particular shaping activity may lack the flexibility needed to transition to a different role, or, more importantly, they may be unable to transition rapidly to combat missions. Over time, it may be possible to design and designate more specialized units for the conduct of shaping missions, but that time will come later rather than sooner.

Relying on specially task organized and trained units for peacetime engagement activities is not without problems. If the Army relies heavily on high technology, the time required to gain and maintain adequate levels of proficiency may mean that those units can perform no other missions without seriously degrading their ability to fight. At the very least, such units may require considerable training and reequipping to transition from finely honed combat capabilities to the skills required for specific peacetime engagement activities, as well as time to recover and to regain eroded combat skills. This may be especially true of "fire" and "maneuver" type combat units.

Further complicating the task organizing option is that RMA manning levels of units equipped with high technology equipment will be relatively small. To create a force of sufficient capabilities to undertake shaping activities—which are usually personnel intensive—may require so many units as to undercut the fighting capabilities of the overall force. Despite these difficulties, it may still be possible to assemble the appropriate mix of units for a specific mission. This may dictate, however, drawing together units that do not have habitual working relationships which will require increased training time or reduced effectiveness if adequate preparation time is not available. It may also result in disrupting the organization and readiness of a number of formations to provide the requisite mix of capabilities needed for a particular mission.

In sum, task organizing large combat formations for missions other than their deterrence and compellence roles and transitioning back again is no small feat and will require time and resources to accomplish. Additionally, opportunity costs lost while these units are retraining or otherwise unavailable for combat operations have to be considered. Depending on the size of the force engaged, the loss of deterrent value also must be factored into the strategic calculus.

Despite its drawbacks, the Army should adopt the task organization option. While not an optimum solution, this alternative offers the greatest flexibility, whether in terms of responding to a broad range of missions or to changing geo-strategic conditions. It also provides the greatest versatility for adapting force structures over time.

General Force Sizing Considerations.

Complementary versus Additive Capabilities. Overlap exists between the capabilities required to perform the military's anticipated roles of deter, compel, shape, and support the nation. As indicated earlier, this overlap may be smaller than heretofore has been the case. For example, if forces slated against the deter and compel roles are primarily equipped with high technology equipment that relies on high speed maneuver and precision guided munitions, then these forces may be ill-suited for many support to the nation or shaping activities. Even when significant overlap exists, requirements for specialized units that can be employed in multiple roles concurrently (e.g., civil affairs, special operating forces, military police) may exceed those needed to support combat structures. Finally, as will be discussed below (Specific Force Sizing Considerations), some capabilities needed for support to the nation and to provide for the Army's institutional support base are not found in units performing the deterrence, compellence, and shaping roles. Thus, there is an additive, as well as a complementary nature to force requirements.

To keep such additive requirements to a minimum, a number of steps can be taken. First, units can be designed for increased flexibility. Undoubtedly, this is easier said than done. Certain contingencies will require specific capabilities. 52

Designing multi-mission capable equipment and systems is another option that should be pursued. Certainly, some equipment and systems, especially combat systems, may have to be optimized for their combat capabilities. But even in such a case, innovative approaches to the use of such platforms can result in utility beyond the optimized role: e.g., the use of AH-64 attack helicopters for crowd control in Bosnia.

Also, it may be possible to develop systems that have multiple capabilities. For example, a truck can carry munitions or humanitarian supplies. A better example may be the UH-60 Blackhawk helicopter. Designed primarily as

a utility transport helicopter, it can transport peacekeepers or logistics supplies as easily as it can combat infantrymen. With the addition of external store support systems, moreover, the Blackhawk can be configured to carry rockets and sophisticated anti-tank munitions.

Granted, such multidimensionality may result in systems that are not fully optimized for a particular combat role. But the costs of optimization must be balanced by increased overall applicability of the system's capabilities across the range of military operations. And, while the costs of a multi-mission system may be more than an optimized counterpart, the purchase of fewer systems to perform a greater range of missions may mitigate overall procurement costs.

Probable Areas of Deployment. Where one anticipates having to deploy forces for operations and the types of missions anticipated will have a strong effect on eventual force sizing. Europe, the Middle East, and Asia will remain the three primary regions of the world where the United States has vital and important national interests that it may feel obliged to defend. Latin America and Africa will likely be the focus of shaping activities.

Forecasts indicate that Europe may face considerable instability in the Balkans, the Mediterranean basin, Turkey, and on the periphery, the oil fields of Central Asia, as well as those surrounding the Caspian Sea. While events could spiral into conflict, a major theater war appears unlikely at the moment. Therefore, the forces required for this region will require capabilities ranging from limited ability to deter and compel to shaping activities that reassure friends and allies and bolster emerging democratic partners throughout the region.

In the Middle East, the passage of time may not substantially reduce force capability requirements. While one hopes for peaceful resolution of the Arab-Israeli conundrum, recent and distant history offers little encouragement. Even should a lasting peaceful settlement be found, events elsewhere in the region are unlikely to

result in reduced force requirements. The course of the last 20 years offers few indications of a major rapprochement with Iran, and the events of the last decade augur against rapid reconciliation with Iraq. Lastly, unforeseen events, which occur frequently in the region, could add demands for more forces.

In the Asia-Pacific area, it is safe to assume that the "Korean Question" will have been resolved—one way or another—by 2010. Until the situation in Korea is resolved, forces adequate to perform deter and compel roles will be required in the region. These forces will have to be backed up by high readiness, high capability forces in the United States. Should North Korea implode, a surge of substantial combat and shaping forces would likely be required to assist the Republic of Korea. If Korea unifies peacefully and other conditions merit, then forces dedicated to performing the deter and compel roles in East Asia could decline over time.

What security arrangements and requirements might arise to cope with a unified Korea, a rising (or risen) China, an independent Russian Far East (perhaps), and a Japan coping with these massive shifts in its geo-strategic position cannot be foretold. The United States, therefore, will have to retain sufficient forces and flexibility to respond to changes as they occur. If a major regional competitor emerges over the course of the next 15-20 years, deter and compel capabilities may be required for a considerable time beyond the planning period considered herein. Additionally, opportunities for shaping activities appear to be on the rise (Vietnam, Indonesia, and India-Pakistan).

Specific Force Sizing Considerations.

Sizing Considerations for the Deter and Compel Roles.⁵³ Army forces circa 2010 must be able to deter an adversary, and, if deterrence fails, compel the opponent to accede to U.S. national will. Under certain conditions, such forces must be able to deny opponents their strategic objectives, sustain a defense, build up combat power, and conduct decisive operations to restore the *status quo ante bellum* or

to achieve U.S. national objectives. Under other conditions, forces must be capable of immediate rapid offensive operations conducted simultaneously throughout an area or theater of operations to collapse an opponent's will to resist. When necessary, forces must be capable of complex, sequenced, or synchronized operations that support diplomatic efforts or achieve U.S. policy goals. In all conditions, forces should be maintained at relatively high readiness, ⁵⁴ must be capable of rapid power projection to the point of crisis (to include forced entry), and require potent combat capability to fight and win against anticipated opponents.

The number of potential opponents also must be factored into decisions on future force structures. Given the likely international security environment circa 2010, the United States must retain the capability to deter, or if deterrence fails, the ability to defeat in rapid sequence potential opponents in two geographically distant regions. Some might criticize such a conclusion as being little more than a continuation of the supposedly "discredited" two Major Regional Contingency force structure sizing criterion. But, there is sound rationale for using a two MTW sizing criterion. ⁵⁵ First, few realistic observers would argue against the United States maintaining sufficient capability to effectively defeat at least one opponent—either actual or potential.

Relying on the slim reed of a single MTW deterrent capability begs the question: What would United States do if faced with a second (or third) such war? While one may hope that the United States will face no more than one opponent, future force planners cannot be sure of such an outcome. Indeed, forecasts argue against such optimism. A declared and manifest one MTW capability would give great incentives to a long patient aggressor to strike while the United States was fully engaged elsewhere, the 21st century equivalent of the infamous "Acheson line" across the Sea of Japan in early 1950. Should war break out in one theater, it would place all forward stationed or deployed forces in other theaters of war at risk. If war erupted in the

Persian Gulf, for example, would we just hope for the best for U.S. forces in Korea? In the worst case, the United States may be strategically paralyzed, or at least self-deterred, because it may not wish to commit to a first contingency because of risks posed by a second. Thus, by relying on a single deterrent capability, the United States may find itself faced by a strategic *fait accompli*.⁵⁶

Moreover, such an option may undermine the U.S. ability to reassure allies. For example, if the United States opts for a single MTW deterrent capability, which ally, partner, or region does it relegate to secondary priority? What effects might such a decision have on stability within a country or the region as a whole? Some states may feel susceptible to coercion by their neighbors and embark on an arms build-up, contributing to a regional arms race. The opportunities for creating disequilibriums in regional balances of power are considerable.

Equally important, deterrence cannot be calculated to exact specifications. Cutting capabilities too fine could result in the "gunfighter paradox." Because each side is roughly equal, the one who draws first has the greatest advantage; a condition that contributes to instability rather than deterrence. Furthermore, a U.S. perception of adequate deterrent capability may not be shared by an opponent.⁵⁷ A clear capability to deter two likely contingencies would go a long way toward reducing the dangers of miscalculation.

Sizing Considerations for the Shaping Role. The wide variety of potential missions to be performed within the shaping role yields an equally broad range of requisite capabilities. As currently conceived, shaping activities will include promoting regional stability, preventing or reducing conflicts and threats, and deterring aggression and coercion. In support of this role, forces will be needed for forward stationing or rotational assignments overseas, manning international headquarters, combined and joint exercises, peace operations, military-to-military contacts, defense cooperation, and security assistance.

Shaping activities also will include support for humanitarian operations. Occasionally, natural or manmade disasters may overcome the ability of international organizations, friends, allies, or potential partners to respond effectively. In such cases, the United States has unique capabilities which it can bring to bear quickly to provide urgent relief or to jump-start a larger civilian effort. ⁵⁹

Because shaping activities can vary from smaller-scale contingency operations (which, despite their name can require a considerable number of forces ⁶⁰) through small teams and detachments, shaping forces must be capable of operating across the full range of military operations, to include combat. While the capabilities needed to perform these varied missions may be inherent within existing force structures, the time, number, frequency, and duration of such missions may require additional forces beyond what are needed simply to support anticipated military operations.⁶¹ This especially may be the case if shaping activities assume the proportions that many assume for the future.

Additional force structure may be needed to accommodate demands for specialized units and to ensure that the pace of shaping operations does not stress other elements of the force structure. 62 The nature of many shaping activities (such as humanitarian assistance, disaster relief, mobile training teams, logistics, communications interoperability, peace operations) means the preponderance of shaping missions may fall upon CS and CSS units. Current experience and future forecasts also indicate that units and personnel that have a dual military-civil application (e.g., military police, civil affairs, psychological operations, engineers, aviation, and all forms of logistical support) will be in high demand. At the same time, increasing automation, personnel reductions, and consolidation of fewer and leaner units at higher echelons of command as a result of the "Revolution in Support" are likely to result in fewer CS and CSS units being caught between diminishing numbers and growing demand for their services. 63

Projections of microbial threats (e.g., Ebola, Marburg, and Lassa fevers) to U.S. national interests may place a premium on specialized medical detachments and capabilities to augment existing civil capacities, perhaps significantly. ⁶⁴ The increasing potential for a rogue state or disaffected group to resort to nuclear, biological, or chemical weapons also indicates a need for specialized Army units to support civil authorities. ⁶⁵

Increased participation in stability operations also may call for greater numbers of special operations forces (SOF) units. SOF units, such as PSYOPS, civil affairs, and special forces units bring unique and highly useful capabilities to shaping activities. Similarly, SOF personnel possess language skills, regional expertise, and knowledge of local customs and cultures that are invaluable in a wide variety of missions falling under the shaping umbrella. ⁶⁶ Moreover, such units and personnel reinforce and complement skills needed to deter and compel.

Hedging. In determining Army XXI force sizing requirements, planners must recall that risk management is not an exact science. Miscalculations can occur—on all sides. Thus, U.S. planners may underestimate the degree of risk or the quantity of forces required to meet the two MTW requirement. Or, a second (or third) potential opponent could miscalculate U.S. capabilities or national will. Forces beyond the two MTW requirement may be needed, therefore, to hedge against miscalculation or uncertainty.

Nor can planners count on having all forces immediately available for operations in the event of a MTW. Forces involved in shaping activities, for example, may not be immediately available for a crisis. Or, forces engaged in smaller-scale contingencies or support to the nation may be involved in operations deemed essential to U.S. national interests or engaged in commitments that do not allow for the rapid redeployment of units.

Additional missions beyond the two MTW requirement also may necessitate more force structure than anticipated. This may be especially true of forces that may be involved in

shaping activities, which tend to rely heavily on CS and CSS formations. Units that perform unique or specialized missions and tasks (e.g., SOF) may add further to force structure requirements. In short, planners may have to design a larger force than may be required strictly to meet the two MTW sizing criteria.

Hedging forces offer considerable utility beyond the points raised above. For example:

- When combined with high-technology elements, they provide a hedge against the emergence of a global or significant regional peer competitor.
- In the event the United States is involved in an MTW and a number of concurrent smaller-scale contingency operations, hedging forces could provide reinforcements to the initial MTW, should they be required.
- Should an MTW be underway, hedging forces offer a deterrent against the outbreak of another major regional conflict or one or more lesser conflicts.
- If forces primarily performing the deter and compel roles are optimized to conduct certain operations (e.g., high technology precision engagement/dominant maneuver), additional forces may be able to counter asymmetric responses to U.S. capabilities.
- Similarly, if forces performing deter and compel roles are optimized for an MTW requirement, hedging forces could assume the majority of peacetime engagement activities or support to the nation.
- Such forces provide flexibility and adaptability to hedge against the changing demands of the evolving international security environment.

Forces for the Support to the Nation Role. By law or DoD regulation, the U.S. Army provides a broad array of services to the nation on a daily basis. ⁶⁷ Consequently, the Army is

little able to alter either the numbers of personnel or forces required for these duties. The Army also will continue to provide the bulk of personnel and resources in domestic support operations on a crisis basis. Combat capabilities also may be required, if in a limited extent, to fight terrorism, drug trafficking, or international large-scale crime. Many, but not all, of the active units required to fulfill the support to the nation roles in a crisis would come from forces fulfilling other roles. Specific units and forces needed to fulfill these special capabilities may have an additive effect on Active Component force structures or considerable effects on Reserve Component structures.

Institutional Support Base. The Army requires forces (largely personnel and headquarters) to lead, recruit, man, train, equip, sustain, and manage. These units and individuals are not organized, trained, or equipped to deter, compel, or conduct other roles. They are essential, nonetheless, for the day-to-day functioning of the Army, and must be accounted for in determining its eventual size and structure.

Potential Force Sizing Trade-Offs. As noted earlier, there are overlapping capabilities inherent in the anticipated force. Hence, trade-offs between the amount of force structure and forces devoted to a particular role can evolve over time depending upon conditions, such as extant threats, nature of modernization, and the assigned missions or tasks. At this point, it is difficult to forecast with accuracy what conditions might be. A key variable, however, will be the degree of success U.S. shaping policies enjoy. Three general outcomes are possible.

Shaping Unsuccessful. This outcome would call for a larger proportion, perhaps considerable, of forces in the deter and compel role. If peacetime engagement activities do not yield sufficient success, there will be fewer incentives to continue devoting the current levels of resources to shaping activities, and they will be relatively less affordable given potential warfighting needs.

Mixed Success. In this outcome, the evolution of international security generally is positive. Capabilities required of force structures would be roughly akin to today. Conversely, if a major regional or peer competitor emerges, then a greater proportion of forces would be required for the deter and compel roles. Hedging forces may play a larger role, particularly if required to "swing" between deter and compel roles and carry out shaping activities. At the same time, successful shaping activities would provide incentives to maintain and, perhaps, increase the amount of forces devoted to such tasks.

Shaping Succeeds. Over time, this outcome could reduce requirements for forces dedicated to deter and compel roles. Depending upon the conditions, this also could mean a strong reliance on hedging forces. Such forces may be relieved of large-scale requirements for operating in the high technology arena and could focus predominantly on hedging against asymmetrical responses to existing U.S. capabilities (for example, insurgencies, urban warfare, reliance on WMD). Units dedicated to deter and compel roles could be eliminated over time, but it may be more advisable in the near- to mid-term to shift force structure to the shaping role to build on existing momentum and to prevent the emergence of new security risks.

Even should shaping succeed, the United States still will have to maintain some forces dedicated to deter and compel roles. Such capabilities serve to convince potential adversaries that they will never be able to match U.S. capabilities and to remove any incentives for international mischief.

Although each path and potential outcome necessitates a different force structure response, the force structure and sizing to match the range of potential outcomes need not be radically different from each other. But building flexibility over the long term may mean creating forces in the short term that are not necessarily optimized for the particular conditions of the present in order to have the "right forces" at a future date. Planning and creating these future

capabilities may conflict with the demands of current force requirements.

These competing demands will create tensions, no doubt, but they are neither insurmountable nor irreversible. They do call, however, for dynamic strategy and force planning processes. This will require more focused near-term and long-term assessments. If they are not performed routinely, the Army may find itself suddenly short of the capabilities needed to meet the demands of the current or emerging international security environment. Conversely, the Army circa 2010 may find itself with too much of a type of force structure that may not be the most effective for circumstances at the time. The key is to retain sufficient flexibility that permits a timely response to change. If circumstances dictate, emphasis can shift from shaping to deter and compel roles. (See Figure 5.)

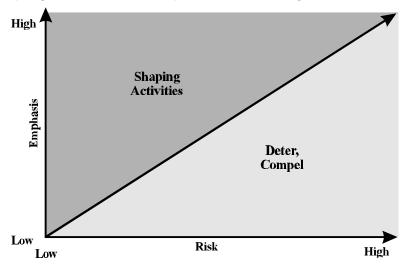


Figure 5. Trade-offs between Deterrence and Compellence and Shaping.

CONCLUSIONS AND RECOMMENDATIONS

While the end of the Cold War made the world safer, it is not yet safe. Granted, no global near competitor looms on the horizon, but traditional causes of conflict remain unabated in key areas of the world where U.S. interests may be challenged by regional powers or coalitions. The rising numbers of failed states, internal conflicts, and transparency of events to the international community may lead to greater U.S. participation in outside intervention. Thus, U.S. military power, and particularly land power, will remain relevant for the foreseeable future.

Within this geostrategic context, the Army can expect to perform its long-standing roles of deterrence, compellence, and support to the nation. Additionally, shaping the international environment will become another role. Within these roles, compellence will remain most important because fighting and winning the nation's wars remains the military's ultimate responsibility, and because strong compellence capabilities undergird deterrence. But, greater relative priority of effort must be given to shaping in the near term, even at the expense of some capability to compel. While risks accompany such a recommendation, they will be minimal in the near- to mid-term and can reap substantial benefits over the longer term.

In the future, the Army will rarely, if ever, act alone. Joint operations with the other Services and cooperation with allies and coalition partners will be the norm. In all roles, but especially with shaping, interagency cooperation and coordination will be crucial to the successful orchestration of future operations. Improvements to the interagency process, along the lines suggested by the National Defense Panel, should be pursued. ⁶⁸

Overseas engagement will remain a critical element of shaping, as well as of deterrence and compellence. The presence of forces permanently stationed overseas may decline over time, however. Thus, power projection capabilities will take on added importance. This will apply not only to forces based in the continental United States, but also to forces permanently stationed overseas which must be capable of deploying to another theater of operations.

It is too soon to tell whether the United States (or others) is on the brink of an RMA. Nonetheless, the Army must

proceed on that premise and should strive to maintain or increase its technological capabilities. That having been said, technology, even with a massive advantage, will not be a panacea for future warfare. Not all situations will lend themselves to RMA solutions. Equally, the Army must be prepared to overcome asymmetric counters from potential foes.

The best means of ensuring future success is by possessing sufficient forces and capabilities to provide the land power contribution to fighting and winning the nation's large-scale wars. It also must have a force structure with the broad capabilities necessary to shape the international security environment, promote U.S. national interests, and meet the demands of a wide range of coercive and persuasive diplomatic efforts.

The Army should not attempt to optimize force structures for a particular role or mission. Instead, it should design forces for maximum flexibility, ensuring that they possess multi-mission capable equipment to the maximum extent possible. These adaptable forces can then be task organized to meet the demands of a particular operation. While not optimized, necessarily, for a set mission, this alternative offers the greatest efficiency and effectiveness over the full range of military operations.

For the foreseeable future, the two MTW sizing criterion should remain in effect. Should conditions in Northeast and Southwest Asia improve, this criterion can be revisited. Such an outcome does not appear probable anytime soon. This force sizing criterion also should provide sufficient forces to fulfill the Army's remaining roles. It may be necessary, however, to create additional forces to perform some of the more specialized missions and tasks within the shaping and support to the nation roles, or to unit types that are in high demand.

The cumulative demands on future force structure capabilities will require Army XXI forces that are versatile (i.e., capable of operating effectively in peace, crisis, and war); flexible (i.e., can be employed in more than one role);

and adaptable (i.e., possess multi-mission capable equipment and personnel that can adapt to rapid changes in roles, missions, and tasks). Only such a force will be able to protect and promote U.S. national interests, while limiting the ability of potential opponents to identify and exploit asymmetric challenges to U.S. capabilities.

For Army XXI to achieve these capabilities may require a fundamental overhaul of how the Total Army is structured and organized. *Specifically, the Army may have to revise the current "Abrams Model" of the Total Force mix that relies significantly on Reserve Component CS, and CSS support of major, sustained Active Component operations. This may require a substantial redesign of the U.S. Army Reserve and the U.S. Army National Guard, as well as the Active Component, to ensure an appropriate mix of capabilities, modernization, and readiness; for example:

- The Active Component's current mix of combat, combat support, and combat service support units may have to be realigned to provide greater Active Component CS and CSS capability to support more frequent and prolonged smaller-scale contingencies and shaping operations.
- The Reserve Components, particularly the Army National Guard, may have to go beyond current plans to convert heavy combat formations to CS and CSS units to generate the capabilities necessary to meet the anticipated increase in smaller-scale contingencies and shaping commitments.
- Financial constraints on funding highly advanced equipment may require a mix of Active Component and Reserve Component heavy combat forces to provide a risk management tool. These forces would have to be able to "swing" between support of RMAequipped forces in the deter and compel role and the conduct of shaping and support to the nation roles.

^{*} This critical issue deserves independent discussion and will be the subject of a forthcoming monograph.

These forces also would have primary responsibility for foreclosing potential asymmetric approaches to U.S. RMA capabilities.

A rough allocation of roles between the Active and Reserve Components can be found at Figure 6.

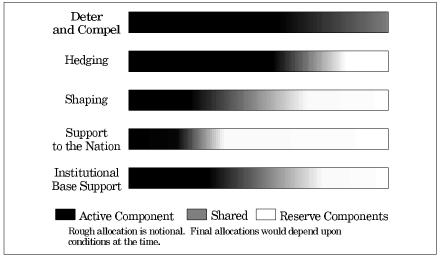


Figure 6. Notional Allocation of Active/ Reserve Component Roles.

ENDNOTES

- 1. General John M. Shalikashvili, *Joint Vision 2010* (hereafter *JV 2010*), Washington, DC: Government Printing Office (hereafter GPO), 1996, p. 1.
 - 2. *Ibid.*, p. 1. Details on the four concepts can be found in pp. 16-26.
 - 3. *Ibid.*, p. 34.
- 4. General Dennis J. Reimer, *Army Vision 2010*, Washington, DC: Headquarters, Department of the Army, n.d., p. 1.
 - 5. *Ibid.*, p. 34.
- 6. See, for example, the assumptions contained in Joseph F. Coates, John B. Mahaffie, and Andy Hines, 2025: Scenarios of U.S. and Global Society Reshaped by Science and Technology, Greensboro, NC: Oakhill Press, 1997, pp. 9-10. Interestingly, world tensions increase despite the overwhelmingly positive trends identified in the remaining assumptions. Ibid., pp. 5-13.
- 7. Alvin Toffler, *The Third Wave*, New York: Morrow, 1980, and expanded in Alvin and Heidi Toffler, *War and Anti-War*, Boston: Little, Brown, 1993.
- 8. Initially published as "Jihad vs. McWorld," *The Atlantic Monthly*, Vol. 269, No. 3, March 1992, and later expanded into Benjamin R. Barber, *Jihad vs. McWorld*, New York: Ballantine Books, 1995.
- 9. Robert D. Kaplan, "The Coming Anarchy," *The Atlantic Monthly*, February 1994. Kaplan extends the discussion and expands the geographic area of crisis in *idem*, *The Ends of the Earth*, New York: Random House, 1996.
- 10. See Martin van Creveld, *The Transformation of War*, New York: The Free Press, 1991. In the current author's opinion, the traditional state system will continue to exist for the foreseeable future. While those that forecast the end of the nation-state may eventually be proved correct, considerable time will elapse before the United States will be unconcerned about such bodies. The United States will have to retain forces capable of meeting challenges from such states. At the same time, the rising tide of lawlessness and failed states is unlikely to abate and may require a U.S. military response that may call for significantly different force structures than conventional state-on-state warfare. The United States will need forces to meet risks posed by both types of warfare.

- 11. Robert J. Bunker, "Epochal Change: War Over Social and Political Organization," *Parameters*, Vol. 27, No. 2, Summer 1997, pp. 15-25.
- 12. For but one example of Ralph Peters' theme, see "Constant Conflict," *Parameters*, Vol. 27, No. 2, Summer 1997, pp. 4-14. For his views of future warfare, see "Our Soldiers, Their Cities," *Parameters*, Vol. 26, No. 1, Spring 1996, pp. 43-50.
- 13. Many of the forecasts highlighted above are highly pessimistic. Moreover, six times in this century (Spanish-American War, World War I, World War II, Korea, Vietnam, and Kuwait) the United States has been engaged in a major war that has required the projection of significant military power beyond the shores of the United States. If these trends continue, and there is no evidence to support the contrary conclusion, the United States can expect to engage in a major conflict within the next 20-30 years. A counter to the contention that diminishing resources will lead to conflict can be found in Julian L. Simon, *The Ultimate Resource 2*, Princeton: Princeton University Press, 1996.
- 14. One need only note the magnitude of change (largely positive, on balance) in the last decade to understand the potential for change in the coming decade. But that change may not be positive. Occasionally, these challenges may erupt in violence, or require a military response. For a brief discussion of additional challenges, see Zalmay Khalidzad, "Strategy and Defense Planning for the Coming Century," in Zalmay M. Khalilzad and David A. Ochmanek, eds. *Strategy and Defense Planning for the 21st Century*, Santa Monica, CA: RAND, 1997, pp. 15-20.
- 15. For instance, Turkey and any one of several neighbors, the Middle East, Asia, the Balkans, or Africa.
- 16. After the example of Operation DESERT SHIELD/STORM, some might conclude that it would be unlikely for a regional power to challenge U.S. national interests. But the outbreak of the Gulf War underscores the likelihood of miscalculation. Also, under appropriate circumstances, a denial strategy (e.g., the straits of Hormuz, Taiwan Straits) may appear adequate for short-term success. Moreover, time erodes the object lesson of the Gulf War and perceptions cloud judgment.
- 17. William J. Clinton, A National Security Strategy for a New Century [hereafter, NSS], Washington, DC: GPO, May 1997, p. I.
- 18. Secretary of Defense William S. Cohen, *Report of the Quadrennial Defense Review* [hereafter *QDR*], Washington, DC, May 1997, pp. 9-16.

- 19. For a brief discussion of the four long-standing roles, see William T. Johnsen, *The Future Roles of U.S. Military Power and Their Implications*, Carlisle Barracks, PA: Strategic Studies Institute, April 18, 1997.
- 20. Deterrence is generally well-understood to mean persuading an opponent not to undertake a particular action because the potential costs and risks outweigh the perceived gain. Gordon A. Craig and Alexander L. George, *Force And Statecraft: Diplomatic Problems of Our Time*, New York: Oxford University Press, 1983, p. 172. For an excellent discussion of this concept, see *ibid.*, pp. 172-188. The issue of conventional deterrence is undergoing a reexamination in the post-Cold War era. See, e.g., Gary Guertner, "Deterrence and Conventional Military Forces," *Washington Quarterly*, Vol. 16, No. 1, Winter 1993, pp. 141-151. See also, Robert B. Haffa, Jr., "The Future of Deterrence in the New World Order," in *The Search for Strategy: Politics and Strategic Vision*, Westport, CN: Greenwood Press, 1993, pp. 147-165.
- 21. The United States must retain a credible nuclear deterrent. Long-standing concepts will retain utility, albeit with greatly reduced numbers of warheads and delivery systems. For a brief discussion, see General Eugene B. Habiger, "Deterrence in a New Security Environment," Institute for National Strategic Studies, National Defense University, *Strategic Forum*, No. 9, April 1997.
- 22. For a brief description of the consequences of reliance on compellence, see Johnsen, *The Future Roles of U.S. Military Power and Their Implications*, pp. 8-10. For a detailed discussion of compellence, its origins, and the nuances of the term, see Thomas C. Schelling, *Arms and Influence*, New Haven, CN: Yale University Press, 1966, pp. 69-92. For a discussion of the coercive diplomacy, see Gordon Craig and Alexander George, *Force and Statecraft*, pp. 189-203. Craig and George use coercive diplomacy as a synonym for compellence. But compellence is a broader term which includes not simply persuading an adversary to adopt a certain course of action, but also to compel an opponent to conform to U.S. national will. In this latter case, total defeat on the battlefield would be the ultimate expression of compellence. Such a construct goes beyond the concept of "persuasion" that is the focus of Craig's and George's discussion.
- 23. This presumes, of course, that future forces are capable of effectively compelling.
- 24. *QDR*, p. 11. The *QDR* defines smaller-scale contingency operations: "These operations encompass the full range of joint military operations beyond engagement activities, but short of major theater warfare...." *Ibid.*, p. 11.

- 25. For example, past missions have included exploring the western frontier, serving as a constabulary force in newly settled regions, engineering railroads and inland waterways, constructing the Panama Canal, and conducting medical research.
 - 26. Cohen, QDR, pp. 9-11.
 - 27. Ibid., p. 9.
- 28. Sir Michael Howard, "Lessons of the Cold War," *Survival*, Vol. 36, No. 4, Winter 1994-1995, p. 165. For a brief discussion of reassurance, see Johnsen, *The Future Roles of U.S. Military Power and Their Implications*, pp. 11-12. For the benefits gained by the United States from reassurance, see Paul K. Davis and Richard L. Kugler, "New Principles for Force Sizing," in Khalilzad and Ochmanek, eds., *Strategy and Defense Planning for the 21st Century*, pp. 106-107.
- 29. U.S. Army. Field Manual (FM) 100-23, *Peace Operations*, Internet, http://carlisle-www.army.mil/usacsl/pki/100-23.
- 30. Peacetime engagement activities are drawn from *National Military Strategy of the United States—Shape, Respond, Prepare Now: A Military Strategy for a New Era* [hereafter *NMS*], Washington, DC: Office of the Chairman of the Joint Chiefs of Staff, September 1997, pp. 6-15.
- 31. For earlier emphasis on shaping, see Former Secretary of Defense William J. Perry's speech at Harvard University (Remarks at the John F. Kennedy School of Government, Harvard University, May 13, 1996), idem., Annual Report to the President and the Congress Washington, DC: GPO, March 1996, pp. viii-ix, idem., "Defense in an Age of Hope," Foreign Affairs, Vol. 75, No. 6, November/December 1996, pp. 64-79, and Deputy Secretary of Defense John P. White, "Preventive Defense Key to Contemporary Defense and Foreign Policy," ROA National Security Report, The Officer, September 1996.
- 32. "Force Structure: Numbers, size, and composition of units that comprise our Defense forces; e.g., division, ships, air wings." Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms, March 23, 1994, p. 237. While the current nomenclature for forces will be retained in this monograph, this does not imply that forces will remain unchanged. The intent herein is to speak in terms of the current capabilities of the forces. In most ways, the name used is irrelevant to the final outcome. Battalions, brigades, and divisions undoubtedly will be retained in future force structure. But, those units may have little in common with the current units.

- 33. This task will be left to more competent authorities. A number of force structure planning methodologies will be available. The threatbased planning of the Cold War is currently under fire, but can be resurrected if a threat of similar magnitude to the Soviet Union of the Cold War emerges. Advocates of capabilities-based planning (e.g., Colonel James Dubik, "Sacred Cows Make Good Shoes: Changing the Way We Think About Military Force Structure," Institute of Land Warfare, Association of the U.S. Army, Landpower Essay No. 97-1, February 1997) offer an enticing methodology. But this method still cannot escape the guestion of how much capability will be required? The ultimate answer, of course, depends upon the size of the threat. The Adaptive Planning Model proposed by RAND analysts Paul K. Davis, David Gompert, and Richard Kugler ("Adaptiveness in National Defense: The Basis of a New Framework," Issue Paper, Santa Monica: RAND, August 1996 and expanded in idem., "Adaptiveness in National Defense: The Basis of a New Framework," Khalilzad and Ochmanek, eds., Strategy and Defense Planning for the 21st Century offers a third alternative, but it needs more exhaustive assessment. Another alternative, the Army's Mission Task Oriented Force (MTOF) model that combines capabilities, reasonable threats, and flexibility, also deserves further attention. See "Dynamic Strategic Resource Planning: Toward Properly Resourcing the Army in an Uncertain Environment," Technical Report 97-03 (Draft), Program Analysis and Evaluation Directorate, Office of the Chief of Staff, Army, Washington, DC, n.d., pp. 21-44.
- 34. In short, as former Chairman of the Joint Chiefs of Staff John Shalikashvili pointed out, existing structures, programs, and budgets do not allow planners to begin anew with some sort of force structure tabula rasa. Steven Komarow, "Shalikashvili Outlines Plans for Military's Future," *USA Today*, December 11, 1996, p. 9.

35. JV 2010, p. 32.

- 36. Publication of Presidential Decision Directive 56, "The Clinton Administration's Policy on Managing Complex Contingency Operations," is an excellent first step in this process. See White Paper, "The Clinton Administration's Policy on Managing Complex Contingency Operations," May 1997, for details. But the interagency process must be expanded to include more than the limited category of complex contingency operations. See recommendations contained in *Transforming Defense: National Security in the 21st Century, Report of the National Defense Panel*, December 1997, [hereafter *NDP* Report], pp. 66-67.
- 37. This is not likely to be the case in the event of a MTW. However, cracks in coalitions may arise fairly frequently in smaller-scale contingency operations (e.g., Somalia and allied differences over policies

to pursue in intervening in Bosnia before 1995). Thus, the United States may find itself committed to multiple contingencies that could require considerable force structure

- 38. See, for example, the comments of the Chairman of the NATO Military Committee, Gen. Klaus Naumann (German Army): "The United States is moving with unparalleled velocity toward the kind of high-tech military equipment that has no match in Europe, I am beginning to worry that one day we will wake up and find that our armies can no longer work well together." William Drozdiak, "NATO Finds an Expansive Sense of Purpose," *The Washington Post*, July 6, 1997, p. 1. See also, the comments of The Netherlands Vice-Chief of Defense Staff, Lt. Gen. Ad van Baal, "US Forces' Digital Revolution Threat to Interoperability," *Jane's Defence Weekly*, June 11, 1997, p. 17. Apparently, U.S. Army officials are heeding these calls. See Interview with GEN William Hartzog, Commander, U.S. Army Training and Doctrine Command, *Jane's Defence Weekly*, October 1, 1997, p. 32ff.
- 39. I have borrowed this term from my colleague, Professor Douglas C. Lovelace, Jr. We believe this term may more accurately reflect the capabilities and presence in the future.
- 40. For a brief discussion of overseas engagement, see Paul K. Davis and Richard L. Kugler, "New Principles for Force Sizing," Khalilzad and Ochmanek, eds., *Strategy and Defense Planning for the 21st Century*, pp. 109-114. For a detailed discussion, see Richard L. Kugler, "Managing Regional Security: Toward a New U.S. Military Posture Overseas," in *ibid.*, pp. 213-254.
- 41. For overviews of the RMA, see Commander Graham Ramsay, RN, "The Revolution in Military Affairs: A Primer for the Uninitiated," Research Report 9-96, U.S. Naval War College; James R. Blaker, "Understanding the Revolution in Military Affairs: A Guide to America's 21 Century Defense," Progressive Policy Institute, Defense Working Paper No. 3, January 1997; Elliot Cohen, "A Revolution in Warfare," Foreign Affairs, Vol. 75, No. 2, March/April 1996, pp 36-54. For a brief critique of the RMA, see William T. Johnsen, "The Report of the National Defense Panel" in Earl H. Tilford, Jr. ed., World View 1998, Carlisle Barracks, PA: Strategic Studies Institute, forthcoming.
- 42. Quoted in Ramsay, "The Revolution in Military Affairs: A Primer for the Uninitiated," p. 51. Issues swirling around the issue of whether the United States is in the midst of a RMA will not be addressed here. Rather, the intent is to examine the consequences of a reliance on elements of the RMA for future force structures. For varying views, see Steven Metz, "Racing Toward the Future: The Revolution in Military Affairs," *Current History*, Vol. 96, No. 609, April 1997; and Douglas C. Lovelace, Jr., *An Evolution in Military Affairs: Shaping the Future U.S.*

Armed Forces, Carlisle Barracks, PA: Strategic Studies Institute, June 16, 1997.

- 43. I.e., forces initially outfitted with new RMA-type equipment will have moved to a new generation of technology or be poised for doing so as the last of the force receives its original issue. This condition should surprise no one. It is the usual course of events in the modernization cycle. Nor is it likely to change in a dramatically reduced Army, as the cost of equipment is still likely to stretch out fielding over a prolonged periods.
- 44. For example, an asymmetric approach using large-scale conventional or unconventional forces in urban environments, or under conditions where the likelihood of collateral damage and civilian casualties were high might constrain the use of RMA forces.
- 45. For example, an opponent may attempt to negate or slow down U.S. high technology capabilities through the use of WMD. Or, an adversary may seek to frustrate U.S. reliance on precision weapons systems and rapid maneuver by using dispersion, attrition tactics, or seeking terrain (e.g., urban, jungle, mountains) that reduces U.S. advantage. Conversely, an enemy may take steps to deny the United States the ability to project power to a region.
- 46. Opponents may choose tactical responses that have strategic implications for the United States (e.g., terrorism, guerrilla warfare, combat in cities), as well as at the strategic level (e.g., weapons of mass destruction [WMD]).
- 47. A brief discussion of asymmetry between stakes, and commitment and casualty intolerance is found in Ochmanek and Hosner, "The Context for Defense Planning," Khalilzad and Ochmanek, ed., Strategy and Defense Planning for the 21st Century, p. 65.
- 48. Harry Summers, "Key Questions for the Military in 1997," *The Washington Times*, January 3, 1997, p. 17; *idem.*, "Understanding the Military 'What-Fors'," *The Washington Times*, January 16, 1997, p. 14; Fisher, Hillen, Moore, Phillips, and Spring, "Keeping America Safe and Strong," in Kim R. Holmes and Thomas G. Moore, eds., *Restoring American Leadership: A U.S. Foreign and Defense Policy Blueprint*, Washington, DC: The Heritage Foundation, 1996, pp. 230-231.
- 49. See, e.g., Greg Caires, "Army 'Better Off' Having Done Bosnia Mission, General Says," *Defense Daily*, July 2, 1997, p. 12; MG William Nash cited in CPT Robert Murphy, CPT Fred Johnson, SFC Barry Tankersley, and SSG John Shaw, "Maintaining Warfighting Skills While Keeping the Peace in Bosnia," Internet, http://call.army.mil:1100/call/nftf/novdec96/sec1.htm; *JV 2010*, p. 17; Sean D.

- Naylor, "Readiness Is In the Eye of the Beholder," *Army Times*, February 17, 1997, pp. 18, 20-21, and 30.
- 50. Colonel James Dubik, "The New Logic: The U.S. Needs Capabilities-Based, Not Threat-Based, Military Forces," *Armed Forces Journal International*, January 1997, pp. 42-45.
- 51. For examples of innovative analysis of such options, see especially Douglas A. Macgregor, *Breaking the Phalanx: A New Design for Landpower in the 21st Century,* Westport, CN: Praeger Publishers, 1997. For a brief discussion of a brigade-based army, see John R. Brinkerhoff, "The Brigade-Based New Army," and David Fastabend, "An Appraisal of 'The Brigade-Based New Army'," both in *Parameters*, Vol. 23, No. 3, Autumn 1997.
- 52. For example, the Army planning maxim METT-T (mission, enemy, terrain, troops available and time) will determine the specific capabilities required for a particular mission. Also fighting large-scale armored warfare and an urban insurgency would require considerably different forces and capabilities.
- 53. Because the perceived ability to compel an adversary is an inherent component of deterrence, these two roles will be discussed together.
- 54. Readiness requirements for such forces obviously will depend upon security conditions and perceived warning time. Given the anticipated volatility of the international security environment circa 2010, one anticipates that such forces will have to be kept at fairly high readiness.
- 55. For a detailed discussion of the merits of the two MRC sizing criteria, see Colonel John F. Troxell, *Force Planning in an Era of Uncertainty: Two MRCs as a Force Sizing Framework*, Carlisle Barracks, PA: Strategic Studies Institute, September 15, 1997.
- 56. Of course, this logic could be carried to absurb extremes, and the United States cannot prepare for every potential contingency. But two contingencies seems a logical choice. Few opponents are likely to be willing to sustain the punishment of being the first or second contingency to be defeated. Thus, the ability to deter two opponents is likely to be sufficient to deter more than two.
 - 57. Iraq's invasion of Kuwait (1990) is a case in point.
- 58. *QDR*, pp. 9-10. While these concepts are drawn from current strategy, they have enduring value, and it can be anticipated that these or similar requirements will exist in the future.

- 59. Ibid., p. 8.
- 60. As the U.S. participation in enforcing the peace in Bosnia, Haiti, and Somalia indicates.
- 61. For example, current operations place a burden on such forces as civil affairs, military police, and specialized engineer units.
- 62. This is not just an issue of force sizing, but also of the appropriate levels of combat/CS/CSS units in the inventory.
- 63. This difficulty may be exacerbated considerably if the U.S. military evolves toward what many are calling the RMA. Under RMA, increasing technology would be used to provide greater capabilities and effectiveness with fewer units and personnel. If this happens, then there may be even fewer personnel and units available to perform shaping missions, unless steps are taken to provide requisite numbers and types of forces for such activities.
- 64. For examples of microbial and other threats, see Laurie Garrett, The Coming Plague: Newly Emerging Diseases in a World Out of Balance, New York: Farrar, Straus, and Giroux, 1994.
- 65. For example, if the terrorists who bombed the World Trade Center in New York had possessed and spread nuclear material or biological or chemical agents.
- 66. For ways that SOF can advance U.S. national interests in peacetime engagement, see *SOF Vision 2010*, U.S. Special Operations Command, MacDill Air Fore Base, FL, 1997, pp. 8-11.
- 67. For examples of the variety and scope of such missions see, Director of Military Support, Executive Agent Overview Briefing, n.d.
 - 68. *NDP* Report, pp. 66-67.

U.S. ARMY WAR COLLEGE

Major General Robert H. Scales, Jr. Commandant

STRATEGIC STUDIES INSTITUTE

Director
Colonel Richard H. Witherspoon

Director of Research Dr. Earl H. Tilford, Jr.

Author Dr. William T. Johnsen

Director of Publications and Production Ms. Marianne P. Cowling

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